AMENDMENTS TO THE CLAIMS:

Claims 1-9 (canceled).

Claim 10 (new) A power-equalizing multi-channel fiber laser array comprising:

a pumping laser source for generating a primary pumping laser beam;

a variable ratio optical splitter for dividing said pumping laser beam into a plurality of secondary pumping laser beams;

a plurality of wave division multiplexers, each said wave division multiplexer receiving a respective one of said secondary pumping laser beams and generating a pump signal;

a plurality of erbium-doped optical fibers, each said erbium-doped optical fiber being sandwiched between a pair of fiber gratings to form a resonance cavity, each said resonance cavity being defined by a set of cavity parameters, said cavity parameters being selected such that power output of each said resonance cavity is equal with respect to one another, whereby each said resonance cavity receives a respective pump signal and generates a single-channel laser beam forming a plurality of laser beams defining a multi-channel laser beam.

Claim 11 (new) The power-equalizing multi-channel fiber laser array as recited in Claim 10, wherein said set of cavity parameters includes selective length of each of said erbium-doped optical fibers.

Claim 12 (new) The power-equalizing multi-channel fiber laser array as recited in Claim 10 wherein said set of cavity parameters includes selective concentration of erbium in each of said erbium-doped optical fibers.

Claim 13 (new) The power-equalizing multi-channel fiber laser array as recited in Claim 10 wherein said set of cavity parameters includes selective reflectance of each of said pairs of fiber gratings.

Claim 14 (new) The power-equalizing multi-channel fiber laser array as recited in Claim 10 wherein said primary pumping laser beam has a wavelength of 980 nm.

Claim 15 (new) The power-equalizing multi-channel fiber laser array as recited in Claim 10 wherein said primary pumping laser beam has a wavelength of 1480 nm.

Claim 16 (new) A power-equalizing multi-channel fiber laser array comprising:

a pumping laser source for generating a primary pumping laser beam;

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a variable ratio optical splitter for dividing said pumping laser beam into a plurality of secondary pumping laser beams;

a plurality of variable optical attenuators, each said variable optical attenuator receiving a respective one of said secondary pumping laser beams and generating an attenuated laser beam;

a plurality of wave division multiplexers, each said wave division multiplexer receiving a respective one of said attenuated laser beams and generating a pump signal;

a plurality of erbium-doped optical fibers, each said erbium-doped optical fiber being sandwiched between a pair of fiber gratings to form a resonance

cavity, whereby each said resonance cavity receives a respective pump signal and generates a single-channel laser beam forming a plurality of laser beams defining a multi-channel laser beam, each said variable optical attenuator being selectively tuned such that power output of each said resonance cavity is equal with respect to one another.

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Claim 17 (new) The power-equalizing multi-channel fiber laser array as recited in Claim 16 wherein said primary pumping laser beam has a wavelength of 980 nm.

Claim 18 (new) The power-equalizing multi-channel fiber laser array as recited in Claim 16 wherein said primary pumping laser beam has a wavelength of 1480 nm.